

Appl. No. 09/825,423  
Response dated November 28, 2006  
Reply to Office Action of October 3, 2006

Patent Case: ID01152

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**REMARKS**

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The above claim amendments were discussed during a telephone interview between the undersigned attorney and Examiner Steadman on November 28, 2006. The undersigned attorney thanks the Examiner for his helpful comments on how to clarify the meaning of the previously presented claims.

**STATUS OF THE CLAIMS**

Upon entry of the foregoing amendment, Claims 1-3, 7-9, 11 and 21-22 will be pending.

Claims 9, 11, 21 and 22 are amended to clarify the meaning of the claims. Support for the amendment to Claim 11 is found in the originally filed specification at p. 42-45, examples 14-16. The support for the amendment to Claim 22 is described in detail below, in the Section entitled "CLAIM REJECTIONS - 35 U.S.C. § 112, First Paragraph".

**CLAIM REJECTIONS - 35 USC §112, Second Paragraph**

Claims 9 and 21-22 are rejected for indefiniteness, as being confusing in the use of the transitional phrase "consists of" with respect to the amino acid sequence of the claimed variant. Applicant agrees with the interpretation of these claims as applied in the Office Action, and believes the amended claims are consistent with this interpretation. Thus, Applicant respectfully requests withdrawal of this rejection.

**CLAIM REJECTIONS - 35 U.S.C. § 112, First Paragraph**

Claims 22 stands rejected under 35 U.S.C. § 112, first paragraph, as containing new matter because the claimed polypeptide is allegedly not supported by the specification. As requested in the Office Action, the following paragraph sets forth a detailed explanation of where support for this claim is found in the originally filed specification.

On page 11, lines 14-30, the specification describes the preparation of fragments comprising subdomain II in which a deletion of the anti-parallel  $\beta$  loop at positions 431 to 451 of SEQ ID NO:1 is replaced by insertions of specific sequences (i.e., see lines 17-19 and 26-30). SEQ ID NO:1 is described as the sequence for HCV -1a NS3 at p. 26, lines 25-26. On page 6, lines 18-21, the specification describes SEQ ID NO:5 as being the sequence of a subdomain I,II

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construct containing amino acid residues 181-481 from HCV -1a NS3 (i.e., SEQ ID NO:1) in which 431 to 451 (the anti-parallel  $\beta$  loop) has been replaced by SDGK (SEQ ID NO:2). A comparison of SEQ ID NO:1 and SEQ ID NO:5 shows that the amino acid sequence between positions 181-430 and 452-481 of SEQ ID NO:1 is the same as the amino acid sequence between positions 5-254 and 259-288 of SEQ ID NO:5, respectively. Thus, positions 255-258 in SEQ ID NO:5 represent the insertion of SDGK (SEQ ID NO:2) at the site in SEQ ID NO:1 where the  $\beta$  loop is deleted (i.e., positions 431-451). Page 11, lines 26-30 teach that the deleted  $\beta$  loop could be replaced by other specified sequences. Thus, in other subdomain I,II constructs taught by the specification, SDGK at positions 255-258 in SEQ ID NO:5 would be replaced by SEQ ID NO:7, 8, 9, 10, 11, 12, 13 or 14.

In view of the foregoing, Applicant believes that claim 22 is adequately described in the specification as filed, and respectfully requests withdrawal of this new matter rejection.

Claim 11 stands rejected under 35 U.S.C. § 112, first paragraph for allegedly failing to comply with the written description and enablement requirements. Applicant requests withdrawal of this rejection in view of the amended claim, which is directed to the single species that the Office Action states is described in, and enabled by, the specification.

#### CONCLUSION


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It is believed that the foregoing amendments and remarks place this application in condition for allowance. The Examiner is requested to contact the undersigned attorney if any additional questions or concerns arise.

Respectfully submitted,

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